

REPLY TO LETTER TO EDITOR

Reply to Letter to Editor

Congenital Disease of the Hip

Matthew B. Dobbs MD

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I write in response to the letter written by Drs. George Hartofilakidis and George Babis commenting on the use of the term “developmental dysplasia of the hip” rather than “congenital hip dislocation.”

There is currently no classification system or terminology that sufficiently captures the spectrum of pathology that can be seen in the newborn hip. Currently the term “developmental dysplasia of the hip” is preferred over “congenital hip dislocation” by many authors and journals and is used to refer to any pediatric hip in which the normal relation between the femoral head and the acetabulum is altered.

The shift away from the use of the term “congenital dislocation of the hip” started with a brief report by Klisic in 1989 [1]. A primary argument presented against the use of this term was that the disorder presented as a spectrum of abnormalities and not always as a frank dislocation as the name implied. An additional argument included the fact that some dislocation occurs postnatally making the term “congenital” misleading. Thus, the condition may reflect neither a dislocation nor a congenital one.

To consider the options further, it is helpful to review the classic articles of Dr. Ignacio Ponseti [2, 3], in which he investigated the normal development of the hip, and the development of the hip in cases of dysplasia, subluxation, and dislocation. These studies included cadaveric and radiographic evaluations, showing that, by 11 weeks gestation, the hip is fully formed. It also was observed that a normal infant’s hip is extremely difficult to dislocate even

after division of the joint capsule. In hips with acetabular dysplasia, however, this tight fit between the femoral head and acetabulum is lost, and the head can easily be displaced from the acetabulum. Pathologic specimens of this condition have shown a range of deformities from mild capsular laxity to severe dislocations with femoral head and acetabular malformations [3]. In this sense, the term “developmental dysplasia of the hip” therefore more accurately refers to the many changes seen with this complex deformity than “congenital hip dislocation.”

However, use of the term “developmental dysplasia of the hip” to refer to hips that can be subluxated, frankly dislocated, or just dysplastic also is misleading. Without a classification system and common vocabulary that captures the spectrum of disorders seen in this disorder, controversy will remain regarding how to most effectively communicate about problems in the pediatric hip.

Dr. Stuart Weinstein has proposed use of the term “developmental dysplasia of the hip” for any hip that may be provoked to subluxate or dislocate or for any hip in which the femoral head either is subluxated or dislocated in relation to the acetabulum but that can be reduced into the acetabulum. He uses “developmental hip dislocation” when there is no contact between the femoral head and the acetabulum and the femoral head is not reducible [4]. Although not entirely satisfying, this distinction may be the most accurate to date in capturing the range of possible deformities seen.

An improved classification system and terminology likely will be possible in the future and will be based on the genetics of the disorder. Although the exact cause of the spectrum of hip abnormalities seen in the newborn is not known, genetic factors clearly play a role. Identifying the genes involved, and epigenetic factors, perhaps will allow development of a more useful and prognostic classification system in the near future.

M. B. Dobbs (✉)
Department of Orthopaedic Surgery, Washington University
School of Medicine, One Children’s Place, Suite 4S-60,
St Louis, MO 63110, USA
e-mail: dobbsm@wudosis.wustl.edu

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